

## HUNTING TECHNIQUE OF THE AFRICAN GOSHAWK *ACCIPITER TACHIRO* AND ITS POSSIBLE RELATIONSHIP WITH OTHER *ACCIPITER* SPECIES

Brian Wood

There are only four records of the African Goshawk *Accipiter tachiro* from Somalia listed by Ash & Miskell (1983), all from the woodlands in the Jubba Valley. During August and September 1986 all the remaining gallery forest in the Middle Jubba, between Jilib and Bu'ale, was surveyed by the Somalia Research Project team from the University College London. We recorded African Goshawks at three separate sites. In the only two remaining sizeable blocks of gallery forest, which we studied intensively, this species was recorded almost daily, including an adult and an immature bird together in the largest forest block at Shoonto, south of the Handoodle. Probably at least seven different individuals were recorded in total.

In closed-canopy forest it is often difficult to gain a true impression of the bird community, since many species are rarely seen due to their skulking behaviour or because they are most active high in the canopy. To supplement direct observations we used mist-nets to catch birds in the lower vegetation of the forest. About 500 birds were netted and marked with EANHS rings, including one adult female African Goshawk, which became entangled when it attempted to take a Red-capped Robin Chat *Cossypha natalensis* from the net. Whilst we also caught some individuals of species that typically forage high in the canopy, these were undoubtedly under-represented, both in the netted sample and in sight records. Birds that were active above the canopy were even harder to record, except when they were occasionally glimpsed as they passed over gaps in the canopy.

During the course of our surveys we recorded Black Kites *Milvus migrans*, Harrier Hawks *Polyboroides radiatus* and Bateleurs *Terathopius ecaudatus* often flying above the forest, and on two occasions Beaudouin's Snake Eagle *Circaetus gallicus beaudouini* (possibly the same individual). We also frequently heard large birds diving into the upper canopy, although none of the above species was ever seen to behave in this manner. However, on 22 August, the species that was probably responsible for all of these records was identified when all four members of the team witnessed an attack that took place in a large opening in the forest adjacent to our camp. On that occasion, as previously, our attention was attracted by the noise of a large bird stooping towards the tree-tops. We were able to clearly see an African Goshawk enter the canopy, in a 45-degree dive, and emerge above the trees soon after, clutching a small bird in its talons. Judging from its size, the African Goshawk was a male, but the prey could not be specifically identified.

The hunting technique of African Goshawk that is normally recorded is that typical of all *Accipiter* spp. Prey is usually taken by surprise attack during rapid flight below the forest canopy or along woodland edges. Brown *et al.* (1982) record African Goshawks circling above forest during displays and occasionally flying down prey such as doves in open flight above forest canopy, but, as far as I am aware, stooping attacks on prey in the upper canopy have not been reported previously. In dense forest it could be a productive technique to employ, since several bird and mammal species commonly sit in prominent positions in the top of the canopy and would therefore be vulnerable to such attacks. In the Jubba gallery forest the species most

likely to be victims include Brown-breasted Barbet *Lybius melanopterus*, Retz's Helmet Shrike *Prionops retzii*, Black-breasted Glossy Starling *Lamprotornis curvirostris*, Black-backed Puffback *Dryoscopus cubla*, Huet's Bush Squirrel *Paraxerus ochraceus* and possibly juveniles of the Blue Monkey *Cercopithecus mitis*, which is abundant.

### COMPETITION WITH OTHER SPECIES

Interspecific competition in birds seems often to be reduced by differences in body size. Size differences are particularly marked in active predators (Newton 1979) and in these species intraspecific competition may also be reduced by differences in the size of the sexes. This is correlated with intraspecific differences in habitat use by some species (Marquiss & Newton 1982). During our surveys of gallery forest we commonly recorded three *Accipiter* species, Little Sparrowhawk *A. minullus*, Shikra *A. badius* and African Goshawk. Their sizes are compared in Fig. 1. From this figure it can be seen that a graded sequence of *Accipiter* spp. occurs in gallery forest, with each sex of the three species differing significantly from all others, except for a clear overlap in size between female Shikra and male African Goshawk.

Both sexes of Little Sparrowhawk and Shikra were recorded in our surveys and were observed hunting below the canopy of the forest. The only African Goshawk that we netted was a female, indicating that these also hunt low-down. Although there are recorded differences in the prey-spectrum of African Goshawk and Shikra, with the latter particularly taking lizards as well as small birds and mammals, it is possible that considerable competition could occur between female Shikras and male African Goshawks hunting in the same area. The stooping technique of male African

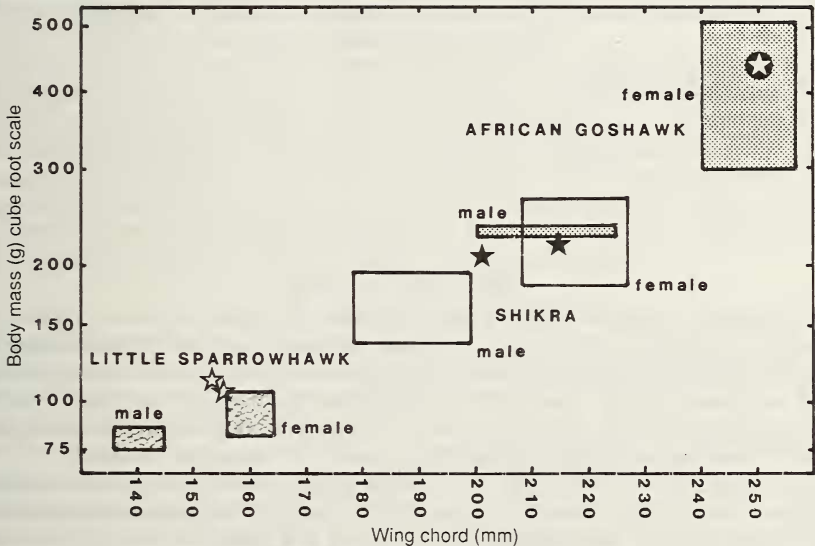


Fig. 1. A comparison between the sizes of males and females of *Accipiter* species found in gallery forest in Somalia. Boxes show the published ranges, and stars show values for individuals caught by the Somalia Research Project 1986. (Sources of published values: Cramp & Simmons 1980, Brown *et al.* 1982.)

Goshawks that is reported here would provide an effective means of reducing competition with Shikra by vertically zoning the activities of these two predators. It may therefore prove to be the usual hunting technique of male African Goshawks in forests where both species are common.

#### ACKNOWLEDGEMENTS

The work of the Somalia Research Project 1986 was only possible through the co-operation of the Ministry of Livestock, Forestry and Range. We received considerable logistical assistance from the Overseas Development Administration (UK) Forestry project in Somalia. Financial help came from many organizations and individuals and will be fully acknowledged in our final report.

#### REFERENCES

- ASH, J.S. & MISKELL, J.E. 1983. Birds of Somalia their habitat, status and distribution. *Scopus* special supplement No. 1.
- BROWN, L.H., URBAN, E.K. & NEWMAN, K. 1982. *The birds of Africa*. Vol I. London: Academic Press.
- CRAMP, S. & SIMMONS, K.E.L. 1980. *The birds of the western Palearctic*. Vol. II. Oxford: Oxford University Press.
- MARQUISS, M. & NEWTON, I. 1982. Habitat preference in male and female Sparrowhawks *Accipiter nisus*. *Ibis* 124: 324-328.
- NEWTON, I. 1979. *Population ecology of raptors*. Berkhamsted: Poyser.

*Brian Wood, Somalia Research Project, Ecology and Conservation Unit, University College London, Gower Street, London WC1E 6BT, England.*

Received 10 February 1987

---

*Scopus* 11 (1): 6-8, 1987

#### EDITORIAL NOTE

Regular readers will have noticed that this issue of *Scopus* has been typeset. Contributors with access to certain types of word processors are invited to send their text on disk. Those with IBM PCs, or PC-compatibles, may send text created in Wordstar™ and label the file 'name. WS'. If you have an Apple Macintosh™ you may send data created in MacWrite, Microsoft Word™ or Works™ word processor; please include a print-out too. Let me know if you would like your disk returned.

All contributions, which will be acknowledged, should be sent to Graeme Backhurst, Box 24702, Nairobi, Kenya. Hints to authors are printed inside the front cover; please follow the instructions given there, and please, if you list References, give journal names in full and town and publisher for books. Also, please make sure that all references cited in the text are actually listed under 'References'.

*Ed.*